

## **ABSTRACT**

The invention provides an apparatus for monitoring a patient, comprising an invasive optical sensor device for monitoring substantially continuously a parameter relating to a bodily fluid of the patient, for example, pO<sub>2</sub>, pCO<sub>2</sub> and/or pH, and an analyser device in communication with the sensor device for analysing a sample of bodily fluid withdrawn from the patient to derive information relating to the sample of bodily fluid. The information may be used for calibrating the sensor device.